



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,046	03/24/2005	Rolf Kordon	2002P01314WOUS	1779

46726 7590 10/04/2007
BSH HOME APPLIANCES CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
100 BOSCH BOULEVARD
NEW BERN, NC 28562

EXAMINER

CORRIGAN, JOSEPH JAMES

ART UNIT	PAPER NUMBER
----------	--------------

3744

MAIL DATE	DELIVERY MODE
-----------	---------------

10/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,046

Applicant(s)

KORDON ET AL.

Examiner

joseph corrigan

Art Unit

3744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9/22/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/24/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the storage chamber and evaporation chamber must be shown or the features canceled from the claims.

Other objections are as follows:

- Please address distinctness issues between “short support” (4) and “central support” (19) found in drawings and specifications reference to “a support” in claims 21& 28.
- “Central bore” element (11) correlation with drawings and claim elements is unclear. Please make clear in application.
- Please make clear in drawings and specification “elastically mobile second end” element found in claim 23, line 3.
- Figure 6, reference number (23), needs clarification. Reference pointer for element (23) leads to one element; however, specification defines two elements, a wire (page 7, line 20) and “locking element” (page 7, line 15) with same reference number. Please make appropriate changes.
- Element number (31) is identified on drawings 1-3, however, fails to be identified in specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

Art Unit: 3744

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims addressed below are objected to because of the following informalities:

- Correlation between "Cam disk" in claims 17 and 18 and element in drawings need clarification.
- In claims 20 & 22, lines 3 and 1, respectively, refer to "a sleeve" whose correlation to elements in specification and drawings is unclear and should be addressed.
- Claims 24 & 25 refer to "a wall" in lines 2 and 1, respectively. Please draw distinctions or make clear sameness between these elements resolving

antecedence issues. In general, please remain clear when using articles "the" and "a" in claims. Use the article "a" when introducing an element and article "the" when recurring.

- Claim 23, line 3 establishes "elastically mobile second end", however, drawings and invention description fail to clearly define this element.
- Claim element (24), namely, "a hole" needs clear correlation to drawing element.

Appropriate correction is required.

Claims 1-14 cancelled per 3/24/05 Amendment.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

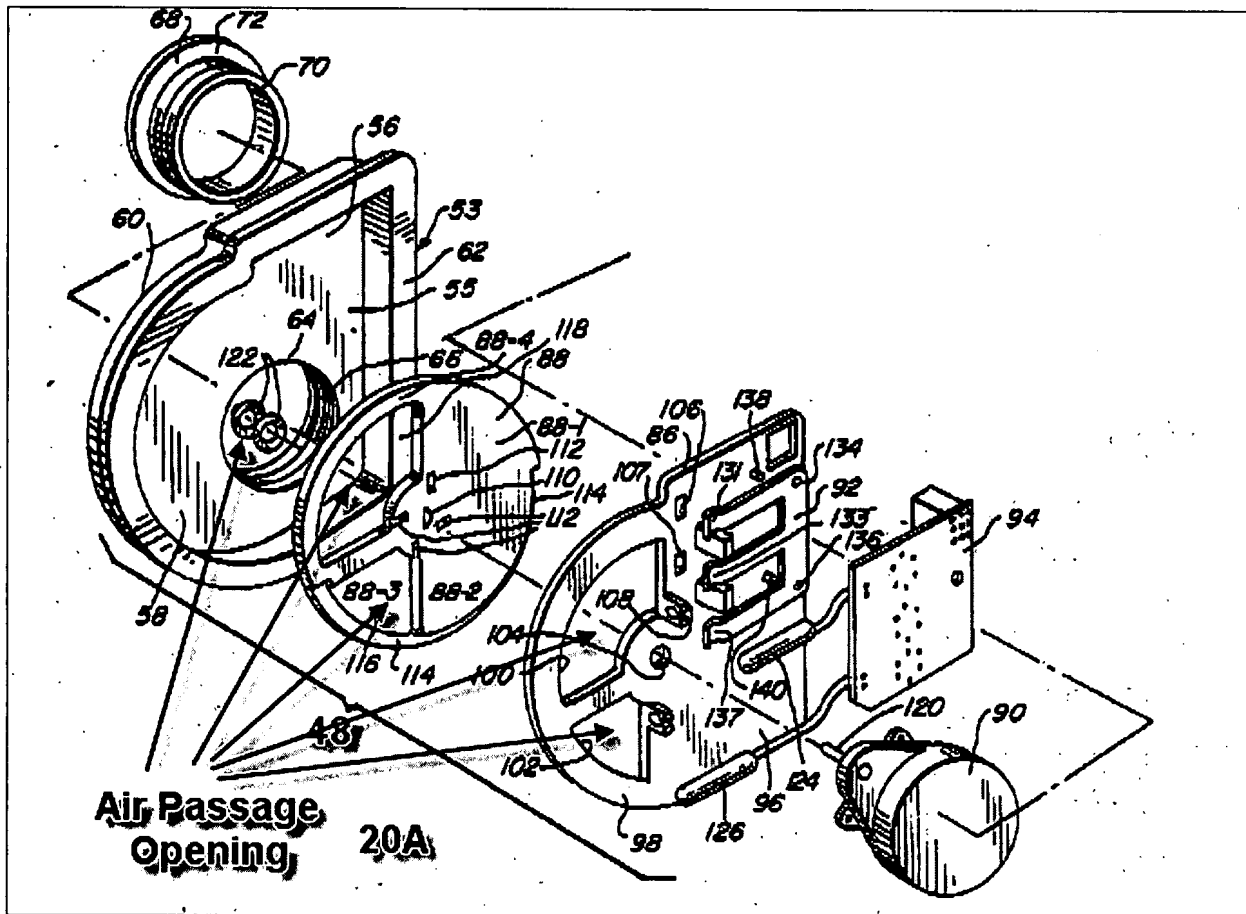
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-21, and 25-28 are rejected under 35 U.S.C. 102(b) as anticipated by Jenke '4,920,758 or, in the alternative, under 35 U.S.C. 103(a) as obvious over Janke et al '4,920,758' in view of Oike '4,852,361"

In re claim 15, Janke et al '758 discloses a storage chamber (22, figure 1); an evaporation chamber (20, figure 1); an air passageway (20A, figure 5') having a plane and enabling air exchange between said storage chamber (22, figure 1) and said evaporation chamber (20, figure 1); said air passageway (20A, figure 5') having an air

Art Unit: 3744

passage opening (**20A, figure 5'**) having a cross-section; a control body (88, figure 5) arranged on said air passage opening (**20A, figure 5'**); said control body (88, figure 5) shiftable between positions (column 6, lines 46-50) in which said control body (88, figure 5) variously covers said cross-section of said air passage opening (**20A, figure 5'**); and said control body (88, figure 5) rotatable about an axis substantially perpendicular to said air passageway plane. Please note that the freezer compartment is being identified as evaporation chamber since air sent through evaporator passes through fan aperture (28) and stored in this compartment.



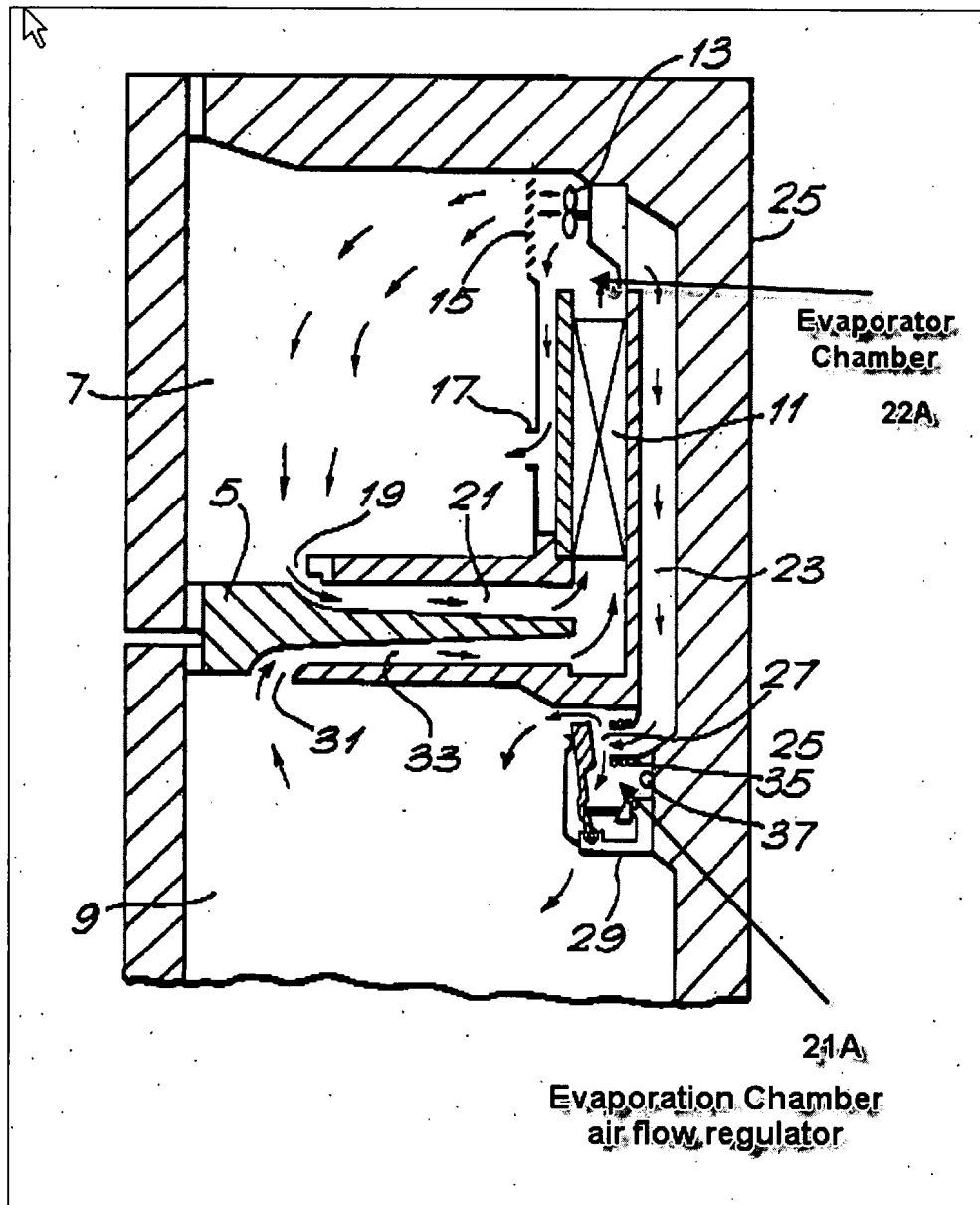
Janke et al '4,920,758' Figure 5'

As an alternative to rejection statement above using Janke '758 (see figure 1) representation of an "evaporation chamber" (20, freezer section), Oike '361 discloses in figure 3 below an airflow regulator (21A, figure 3) operating between a storage chamber (9, figure 3) and an evaporation chamber (22A, figure 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Janke et al '758 by placing evaporation chamber air-flow regulator directly in contact with evaporation chamber resulting in cooling the space

Art Unit: 3744

down more rapidly reducing wear and tear on regulator assembly ultimately resulting in lessening chances of future repairs.



Oike '4,852,361' Figure 3

In re claim 16, Janke et al '758 discloses invention above and further discloses a partition (18, figure 1) formed between said storage chamber (22, figure 1) and said

evaporation chamber (20, figure 1) and said air passageway (**20A, figure 5'**) is formed through said partition (18).

In re claim 17, Janke et al '758 discloses invention above and further discloses said control body (88, figure 5) is formed as a substantially circular disc (88, figure 5).

In re claim 18, Janke et al '758 discloses invention above and further discloses said circular disc (88, figure 5) has a peripheral surface (144) formed as a cam disk.

In re claim 19, Janke et al '758 discloses invention above and further discloses a drive motor (90, figure 5) for driving said control body (88, figure 5) to shift positions and including a switch (128, 130, figure 3) attached to said partition interacts with said cam disk (88, figure 5) for controlling said control body drive motor (90, figure 5).

In re claim 20, Janke et al '758 discloses invention above and further discloses said control body axis (figure 5, dashed line) is formed by a shaft (120, figure 5) of a drive motor (90, figure 5) for driving said control body (48, figure 5) to shift positions, said shaft extending through a sleeve formed in said control body. (See column 4, lines 12-25 regarding selectively positionable baffle)

In re claim 21, Janke et al '758 discloses invention above and further discloses a support (68, figure 5) formed on said air passage opening (**20A, figure 5'**), said support having convex upwardly walls (66, figure 5) above said shaft (120). Please note that "coupling member" (68, figure 5) is a sleeve that threads into circular aperture (64). Please further note that inside wall of insert threaded sleeve is considered "convex upwardly walls" as required in claim limitation. (See column 4, lines 65-68 through column 5, lines 1-3 to further detail correlation)

In re claim 26, Janke et al '758 discloses invention above, however, fails to disclose heating element attached to a periphery of said cylindrical shell element.

Nevertheless, Oike '361 teaches use of heating element (35) attached to a periphery of said cylindrical shell element (53, 86, figure 5). (Please see figure 3 above)

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Janke et al '758 by attaching heating element to a periphery of cylindrical shell element in order to prevent ice build-up. This ice build-up can result in damage to regulator and expensive repair costs.

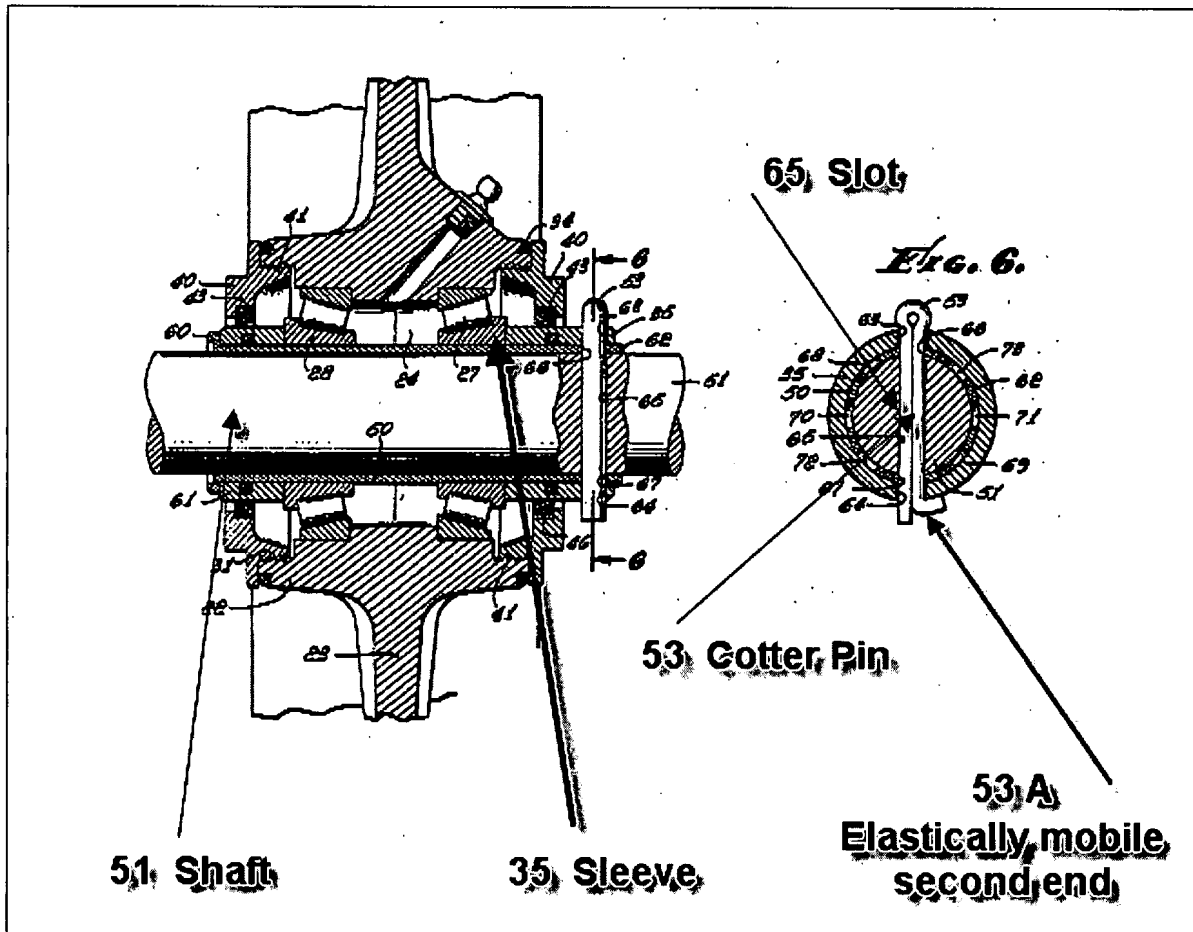
In re claim 27, Janke et al '758 discloses invention above and further discloses a drive motor (90, figure 5) mounted for rotating said control body (88, fig. 5) on said cylindrical shell element (53, 86, figure 5).

In re claim 28, Janke et al '758 discloses invention above and further discloses a support (**21A, figure 5'**) formed on said air passage opening (**20A, figure 5'**) facing said control body (88, figure 5).

5. Claim 22, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janke et al '4,920,758 in view of Ross '2,914,364'.

6. In re claim 22, Janke et al '758 discloses invention above, however, fails to disclose said shaft and said sleeve each have a slot formed therein in a plane oriented diagonally to said axis and a locking element is engaged in said slots to lock said shaft and said control body together.

Nevertheless, Ross '364 discloses said shaft (51) and said sleeve (35) each have a slot (65) formed therein in a plane oriented diagonally to said axis and a locking element (53) is engaged in said slots (65) to lock said shaft (51) and said control body (Janke '758, 88, figure 5) together.



Ross '2,914,364' Figures 5 and 6, respectively

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Janke et al '758 by using slots and locking elements as outlined in figures 5 and 6 above would be to provide secure and easily removable securing system lending itself well to easy repair and thereby lowering repair costs.

In re claim 23, Janke et al '758 discloses invention above, however, fails to disclose said locking element having a first end fixedly secured in said control body and said locking element having an elastically mobile second end, said elastically mobile second end can be displaced to displace said locking element from at least one of said slots. Nevertheless, Ross '364 discloses said locking element (53) having a first end fixedly secured in said control body (Janke '758, 88, figure 5) and said locking element (53) having an elastically mobile second end (53A), said elastically mobile second end (53A) can be displaced to displace said locking element (53) from at least one of said slots (65).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Janke et al '758 by using slots and locking elements as outlined in figures 5 and 6 above would be to provide secure and easily removable securing system lending itself well to easy repair and thereby lowering repair costs.

In re claim 24, Janke et al '758 discloses invention above, however, fails to disclose said locking element enclosed between said control body and a wall, said control body swivel-mounted on said wall and a free end of said locking element can be activated through a hole formed in said control body.

Nevertheless, Ross '364 discloses said locking element (53) enclosed between said control body (88, Jenke) and a wall (53, 86, Jenke), said control body (88, Jenke) swivel-mounted on said wall (53, 86, Jenke) and a free end of said locking element can be activated through a hole formed in said control body (88, Jenke). Please note that

"free end" of locking element is activated through a hole formed in control body by way of stretching elastic end to allow locking element to be removed from hole.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Janke et al '758 to allow locking element to be activated through hole formed in control body to necessitate easy access to control body shaft for repairs lessening cost for said repairs.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **US 4,920,758** discloses refrigeration temperature control regulator using circular disk cam passageway similar to invention herein. **US 6,094,932** discloses a refrigeration airflow diffuser assembly similar to instant application. **US 6,006,529** features a refrigerator having horizontal and vertical dispersing blades similar to invention herein. **US 5,477,699** discloses an evaporator fan control for a refrigerator similar to invention herein. **US 2,914,364** discloses a fastening device for motor application using cotter pin system similar to invention herein. **US 4,852,361** discloses a refrigerator with a malfunction detection system with heating element similar to invention herein.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph J. Corrigan whose telephone number is 571-270-3213. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisors are Cheryl Tyler or Frantz Jules on (571) 272-4834 or (571) 272-6681, respectively. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joseph J Corrigan
Examiner
Art Unit 3744
9/28/07

FRANTZ JULES
SUPERVISORY PATENT EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz Jules', is written over a horizontal line.